

S/N 10/643,740

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Stephan Kurt Gipp

Examiner: Jennifer To

Serial No.: 10/643,740

Group Art Unit: 2195

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Customer No.: 21186

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Title: SYSTEM AND METHOD FOR ALLOCATING SYSTEM RESOURCES

AMENDMENT AND RESPONSE TO NOTIFICATION OF
NON-COMPLIANT APPEAL BRIEF

MS APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

This responds to the Notice of Non-Compliant Appeal Brief mailed on March 9, 2009. In compliance with MPEP 1205.03(B) and 37 CFR 41.37(c)(1)(iii), Appellant submits the following corrected sections from Appellant's previously-submitted Appeal Brief filed February 9, 2009.

Please replace the previously-submitted Grounds of Rejection to be Reviewed on Appeal, Section 6, with the below replacement:

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-9 and 11-34 were rejected under 35 USC § 103(a) as being unpatentable over Shaffer (WO 03/0385545), and in view of Breidenbach et al. (hereafter Breidenbach)(US 2003/0084085).

Please replace the previously-submitted Argument, Section 7, with the below replacement:

7. ARGUMENT

A) The Applicable Law under 35 U.S.C. §103(a)

To sustain a rejection under 35 U.S.C. 103, references must be cited that teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985); MPEP § 2141.02.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).

Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the

background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. *KSR Int'l Co. v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007) (see *KSR* slip op. at 14).

These statements in *KSR* appear to reinforce the statements which were made in *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. These statements in *KSR* also appear to reinforce the statements made in *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002) which indicate that the Office Action must further provide specific, objective evidence of record for finding a reason to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. Mere conclusory statements are unsatisfactory.

Additionally, “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*¹. Finally, Office personnel must rely on the applicant’s disclosure to properly determine the meaning of the claims. *Markman v. Westview Instruments*

B) Discussion of the rejection of claims 1-9 and 11-34 under 35 USC § 103(a) as being unpatentable over Shaffer and Breidenbach.

Claims 1-9 and 11-34 were rejected under 35 USC § 103(a) as being unpatentable over Shaffer (WO 03/0385545), and in view of Breidenbach et al. (hereinafter “Breidenbach”) (US 2003/0084085). This rejection is respectfully traversed.

1. *Shaffer and Breidenbach do not describe every element of claims 1 and 17:*

Independent claims 1 and 17 recite in part,

“assigning the resource consumer one of a set of flavors;
determining whether the resource consumer is limited to receiving
resources including hardware and software resources from a
certain one of a set of resource providers, wherein each of the set
of resource providers has one of the set of flavors; if the resource
consumer is limited to receiving resources from the certain one of
the set of resource providers, marking the plurality of fields to

¹ 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

indicate that the resource consumer is limited to receiving resources from the certain one of the set of resource providers; and allocating a resource to the resource consumer from one of the set of resource providers whose flavor matches the flavor assigned to the resource consumer.”

As noted above, the prior art reference (or, as in this case, references when combined) must teach or suggest all the claim limitations. The Office Action states that various portions in Shaffer disclose the above elements of claims 1 and 17. Applicant respectfully disagrees with the Office Action and asserts that the Office Action has not shown all the limitations of claims 1 and 17 in the cited references. A block diagram representative of the computer system in Shaffer is shown below in FIG. 1. FIG. 1 shows the mapping of task assignments to computer resources. The server shown in FIG. 1 includes various tasks (140) (e.g., DTMF, tone generation, and call progress tone detection) and computer resource values (e.g., CR-Value1, CR-Value2, and CR-Value3). Each of the computer resources (Computer Platform-1, Computer Platform-2, and Computer Platform-3) are configured to be in communication with memory. A table of permitted accesses is stored in the memory, which facilitates the checking of permitted tasks that are allowed for a chosen computer resource.

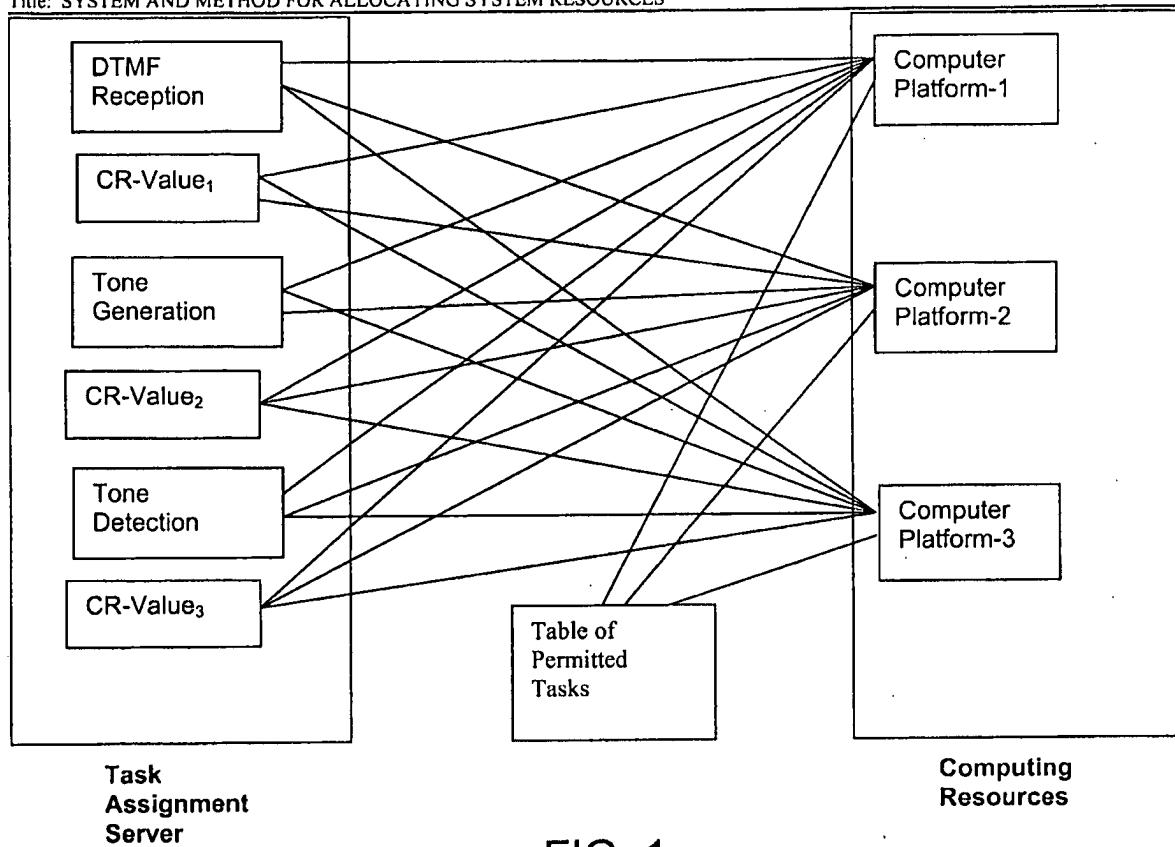


FIG. 1

Contrary to the system shown in FIG. 1, Applicant's application details a system in FIG. 2. FIG. 2 shows a two-way association of resource providers and resource consumers using flavors as described and claimed by the Applicant. Resource consumers may be either a process or a thread. Each process or thread can be associated with a designator (termed "flavor"). In addition, each process or thread can initiate from an operating system or a software application. On the other hand, resource providers are represented by nodes. Each node is associated with at least one flavor.

With regard to claims 1 and 17, the Office Action has not shown in either of the references a teaching or suggestion of "**assigning the resource consumer one of a set of flavors** (emphasis added)." The Office Action states that Shaffer at page 8, lines 4-5, and lines 20-21 discloses this element. On the contrary, the cited portion of Shaffer states the following: "At step 204, a task type and a computer resource value is assigned to each task. The task type and computer resource value may be assigned to a task 140 when the task 140 is generated or

received by the system software 136.” Schaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors as shown in FIG. 2 and claimed in claims 1 and 17. The use of flavors adds a layer of abstraction between the resource consumer and the resource provider, which is not present in the scheme shown in Shaffer. Therefore, Shaffer does not disclose, “assigning the resource consumer one of a set of flavors,” as claimed in independent claims 1 and 17.

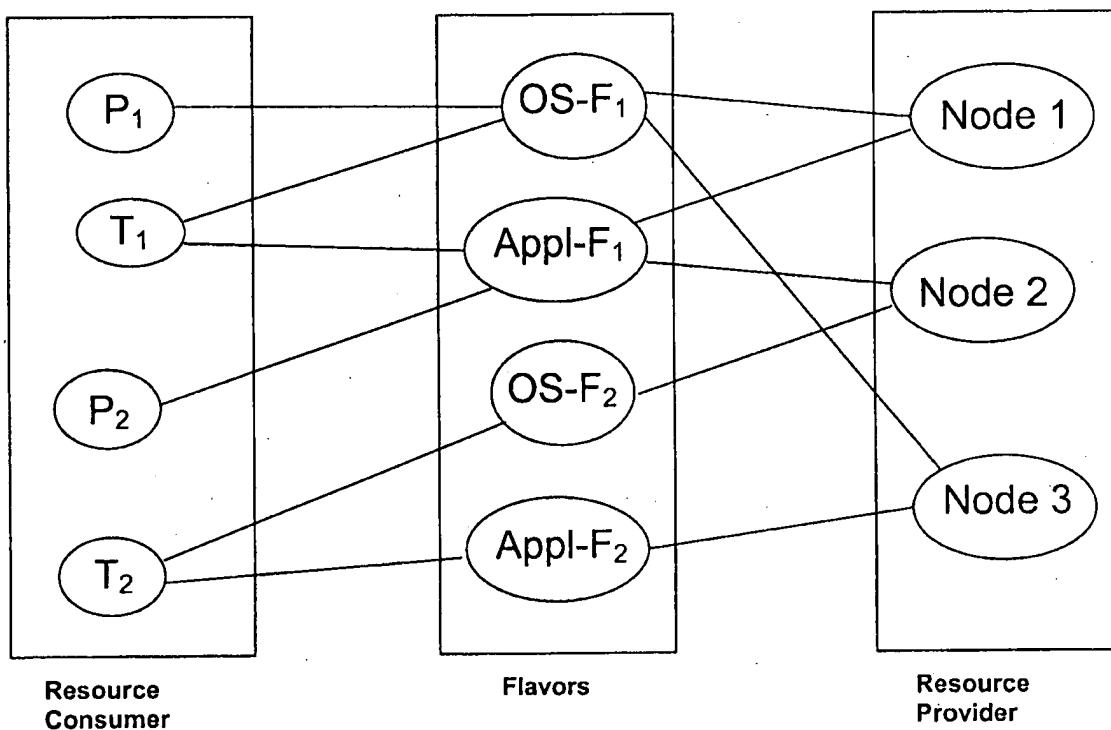


FIG. 2

The Office Action has also not shown in either of the references a teaching or suggestion of “**determining whether the resource consumer is limited to receiving resources including hardware and software resources from a certain one of a set of resource providers, wherein each of the set of resource providers has one of the set of flavors** (emphasis added).” As described above, Shaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors.

Additionally, neither Shaffer nor Breidenbach teach or suggest, “**if the resource**

consumer is limited to receiving resources from the certain one of the set of resource providers, marking the plurality of fields to indicate that the resource consumer is limited to receiving resources from the certain one of the set of resource providers; and allocating a resource to the resource consumer from one of the set of resource providers whose flavor matches the flavor assigned to the resource consumer (emphasis added)."

Applicant teaches, and claims in claims 1 and 17, that allocating a resource to the resource consumer is a function of matching the flavor of the resource provider to the resource consumer.

In contrast, Shaffer allocates tasks indiscriminately to computer platforms. It is up to the computer platform to determine whether a task provided to the computer platform is one that is supported by that computer platform using a table. (See page 8, lines 25-28 and page 10, lines 5-14) This is an inefficient system compared to that described and claimed by Applicant.

Breidenbach describes the following:

"a system for improving the performance of a plurality of peripheral devices that comprises a first peripheral device associated with a first software component and having a first functionality, and a second peripheral device associated with a second software peripheral device being coupled to the first peripheral device being coupled to the first peripheral device, the first and second peripheral devices together performing functionality in addition to the first and second functionalities and having a common user interface." (See Breidenbach, Abstract)

The combination of Shaffer and Breidenbach does not meet the claim limitations of claims 1 and 17 any better than Shaffer by itself. Because critical claim limitations are not disclosed by Shaffer and Breidenbach, either alone or in combination, a *prima facie* case of obviousness has not been established with respect to claims 1 and 17.

2. *Shaffer and Breidenbach do not describe every element of claims 6 and 22:*

Independent claims 6 and 22 recite in part, "receiving a request for a resource from a resource consumer, wherein the resource consumer has a first flavor, the recourse consumer having a plurality of fields associated with the resource consumer, wherein the plurality of fields includes a consumer type field, a flavor field and a place field, the resource consumer including at least one of a process and a thread; determining whether the first flavor matches a second

flavor of one of a set of nodes; if the first flavor matches the second flavor, determining whether the resource is available in the one of the set of nodes; and if the resource is available in the one of the set of nodes, allocating the resource to the resource consumer.”

Applicant respectfully disagrees with the Office Action and asserts that the Office Action has not shown all the limitations of claims 6 and 22 in the cited references. Specifically, Shaffer does not disclose, “**determining whether the first flavor matches a second flavor of one of a set of nodes** (emphasis added).” The Office Action states that Shaffer at page 8, lines 25-30 discloses this element. On the contrary, the cited portion of Shaffer states the following:

“the task 140 is then assigned to a computer platform 148 (step 208). For example, the task 140 may be provided to a computer platform 148 over the network 128. The computer platform 148 may then **determine whether the task type is one that is supported by that computer platform 148** (step 212). If the task type is not supported, the computer platform 148 rejects the tasks 140, and the system software 136 assigns the task 140 to a next computer platform 148 (step 216). (emphasis added)”

As described above and shown in FIG. 2, Shaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors that would provide a layer of abstraction between the resource providers and resource consumers. In contrast, Shaffer allocates tasks indiscriminately to computer platforms. It is up to the computer platform to determine whether a task provided to the computer platform is one that is supported by that computer platform using a table. (See page 8, lines 25-28 and page 10, lines 5-14) This is an inefficient system compared to that described and claimed by Applicant.

Breidenbach describes the following:

“a system for improving the performance of a plurality of peripheral devices that comprises a first peripheral device associated with a first software component and having a first functionality, and a second peripheral device associated with a second software peripheral device being coupled to the first peripheral device being coupled to the first peripheral device, the first and second peripheral devices together performing functionality in addition to the first and second functionalities and having a common user interface.” (See Breidenbach, Abstract)

The combination of Shaffer and Breidenbach does not meet the claim limitations of claims 1 and 17 any better than Shaffer by itself. Because critical claim limitations are not disclosed by Shaffer and Breidenbach, either alone or in combination, a *prima facie* case of

obviousness has not been established with respect to claims 6 and 22.

3. *Shaffer and Breidenbach do not describe every element of claims 11 and 27:*

Independent claims 11 and 27 recite in part, “requesting a resource from a set of one or more resource providers having hardware and software resources, wherein each one of the set of resource providers includes one of a set of flavors, wherein the set of flavors includes an operating system flavor, a support flavor, and an application flavor, and wherein each one of the set of resource providers is a node; and accepting the resource from one of the set of resource providers.”

Applicant respectfully disagrees with the Office Action and asserts that the Office Action has not shown all the limitations of claims 11 and 27 in the cited references. Specifically, Shaffer and Breidenbach does not disclose “wherein each one of the set of resource providers includes one of a set of flavors, wherein the set of flavors includes an operating system flavor, a support flavor, and an application flavor (emphasis added).” As described earlier and as shown in FIG. 2, Shaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors that would provide a layer of abstraction between the resource providers and resource consumers.

Because critical claim limitations are not disclosed by Shaffer and Breidenbach, either alone or in combination, a *prima facie* case of obviousness has not been established with respect to claims 11 and 27.

4. *Shaffer and Breidenbach do not describe every element of claim 14:*

Independent claim 14 recites in part, “a first set of one or more nodes, wherein a node in the first set of one or more nodes includes a second set of one or more central processing units (CPUs); and a physical memory communicatively coupled to each CPU of the second set, wherein the physical memory includes a first flavor of the node, wherein the physical memory includes an operating system, and wherein the operating system is to allocate CPUs of the second set and the physical memory to resource consumers that have a second flavor that matches the first flavor, the resource consumer having a plurality of fields associated with the resource consumer, wherein the plurality of fields includes a consumer type field, a flavor field and a place field, the resource consumer including at least one of a process and a thread.

Applicant respectfully disagrees with the Office Action and asserts that the Office Action has not shown all the limitations of claim 14 in the cited references. Specifically, Shaffer and Breidenbach does not disclose, "**wherein the physical memory includes a first flavor of the node, wherein the operating system is to allocate CPUs of the second set and the physical memory to resource consumers that have a second flavor that matches the first flavor, the resource consumer having a plurality of fields associated with the resource consumer (emphasis added).**"

As described above and shown in FIG. 2, Shaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors that would provide a layer of abstraction between the resource providers and resource consumers. In contrast, Shaffer allocates tasks indiscriminately to computer platforms. It is up to the computer platform to determine whether a task provided to the computer platform is one that is supported by that computer platform using a table. (See page 8, lines 25-28 and page 10, lines 5-14) This is an inefficient system compared to that described and claimed by Applicant.

Breidenbach describes the following:

"a system for improving the performance of a plurality of peripheral devices that comprises a first peripheral device associated with a first software component and having a first functionality, and a second peripheral device associated with a second software peripheral device being coupled to the first peripheral device being coupled to the first peripheral device, the first and second peripheral devices together performing functionality in addition to the first and second functionalities and having a common user interface." (See Breidenbach, Abstract)

The combination of Shaffer and Breidenbach does not meet the claim limitations of claim 14 any better than Shaffer by itself. Because critical claim limitations are not disclosed by Shaffer and Breidenbach, either alone or in combination, a *prima facie* case of obviousness has not been established with respect to claim 14.

5. Shaffer and Breidenbach do not describe every element of claim 30:

Independent claim 30 recites in part, "assigning one or more flavors to each resource provider; creating resource consumers in the computer system, the resource consumer having a plurality of fields associated with the resource consumer, wherein the plurality of fields includes

a consumer type field, a flavor field and a place field, the resource consumer including at least one of a process and a thread; assigning at least one flavor to each resource consumer; and allocating a resource to the resource consumer from the plurality of resource providers whose one or more flavors matches the flavor assigned to the resource consumer.”

Applicant respectfully disagrees with the Office Action and asserts that the Office Action has not shown all the limitations of claim 30 in the cited references. Schaffer does not disclose an intermediate mapping between resource providers and resource consumers using flavors as shown in FIG. 2. The use of flavors adds a layer of abstraction between the resource consumer and the resource provider, which is not present in the scheme shown in Shaffer and Breidenbach.

Applicant teaches, and claims in claim 30, that allocating a resource to the resource consumer is a function of matching the flavor of the resource provider to the resource consumer.

In contrast, Shaffer allocates tasks indiscriminately to computer platforms. It is up to the computer platform to determine whether a task provided to the computer platform is one that is supported by that computer platform using a table. (See page 8, lines 25-28 and page 10, lines 5-14) This is an inefficient system compared to that described and claimed by Applicant.

Breidenbach describes the following:

“a system for improving the performance of a plurality of peripheral devices that comprises a first peripheral device associated with a first software component and having a first functionality, and a second peripheral device associated with a second software peripheral device being coupled to the first peripheral device being coupled to the first peripheral device, the first and second peripheral devices together performing functionality in addition to the first and second functionalities and having a common user interface.” (See Breidenbach, Abstract)

The combination of Shaffer and Breidenbach does not meet the claim limitations of claim 30 any better than Shaffer by itself. Therefore, Shaffer and Breidenbach do not disclose, “**assigning at least one flavor to each resource consumer and allocating a resource to the resource consumer from the plurality of resource providers whose one or more flavors matches the flavor assigned to the resource consumer** (emphasis added),” as claimed in independent claim 30.

Because critical claim limitations are not disclosed by Shaffer and Breidenbach, either alone or in combination, a *prima facie* case of obviousness has not been established with respect

REMARKS

This communication responds to the Notification of Non-Compliant Appeal Brief mailed March 9, 2009 (hereinafter, "the Notification").

The Office states that "the brief does not present an argument under a separate heading for each ground of rejection on appeal" and that "the argument section must match the grounds section insomuch as each ground corresponds to a heading within the argument section." *See* the Notification, p. 1, ## 6 and 10.

Section 6 has been amended to delete the rejection ground based upon 35 U.S.C. § 112, 2nd paragraph therefrom since this rejection has been overcome. *See* Advisory Action (p. 1, #5) mailed January 14, 2009. Section 7 has been amended to add a proper heading corresponding to the remaining rejection ground based upon 35 U.S.C. § 103(a) thereto as requested by the Office.

to claim 30.

Therefore, since there is no evidence in the record to support all the claimed elements of claims 1, 6, 11, 14, 17, 22, 27 and 30, a *prima facie* case of obviousness has not been established with respect to these claims. Therefore, claims 1, 6, 11, 14, 17, 22, 27, and 30 (and all claims depending from them) should be in condition for allowance. Appellant respectfully request reconsideration and the withdrawal of the rejection of claims 1-9, and 11-34.

CONCLUSION

It is respectfully submitted that the objections to the Appeal Brief have been overcome by the amendments made herein. The Examiner is invited to telephone the undersigned at (612) 373-6909 to facilitate prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account 19-0743.

Respectfully submitted,

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Date March 24, 2009 By Thomas F. Brennan
Thomas F. Brennan
Reg. No. 35,075

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EPS-Web, and is addressed to: MS APPEAL BRIEF - PATENTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 24th day of March, 2009.

CHERYL L. DANKERS

Name

Cheryl Dankers
Signature